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## GENERAL NOTICE

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### NOTICE 1199 OF 2013



**INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA**

**EXPLANATORY NOTE TO ACCOMPANY THE DRAFT “BITSTREAM AND  
SHARED/FULL LOOP ACCESS REGULATIONS”**

**PURSUANT TO SECTION 67(4) OF THE ELECTRONIC COMMUNICATIONS ACT  
NO. 36 OF 2005**

I, Stephen Mncube, Chairperson of the Independent Communications Authority of South Africa hereby publish an Explanatory Note to accompany the draft “Bitstream and Shared/Full Loop Access Regulations” released on the 11<sup>th</sup> September 2013 and published in Government Gazette 36840 as set out in the Schedule in terms of Section 4 read with section 67(4) of the Electronic Communications Act No. 36 of 2005.

Public Hearings will be held from the 17<sup>th</sup> to the 19<sup>th</sup> February 2014. Interested persons are invited to submit written representation on this Explanatory Note within 30 days of publication of this Gazette by post, hand delivery, facsimile transmission or electronically (in Microsoft word) for the attention of:

**Mr Christian Mhlanga**

**Project leader**

**or**

**Block A**

**ICASA**

**Pinmill Farm**

**Private Bag X10002**

**164 Katherine Street**

**Sandton**

**Sandton**

Tel: 011 566 3637

Fax: 011 566 3638

Email: [CMhlanga@icasa.org.za](mailto:CMhlanga@icasa.org.za)

CC: [MMankopane@icasa.org.za](mailto:MMankopane@icasa.org.za)



**Dr Stephen Mncube**

**Chairperson**

## **Explanatory Note**

### **Draft "Bitstream and Shared/Full Loop Access Regulations"**

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## 1. Introduction

This Explanatory Note provides background to the Authority's decision-making in the drafting of these regulations as well the rationale for certain of the content of the regulations for public input.

In summary

- The Authority is required to comply with Chapter 8: Electronic Communications Facilities Leasing.
- This is a reactive function where the Authority is obliged to consider any and all disputes related to access to electronic communications facilities.
- Commitments made in terms of the LLU Findings Note may not limit the rights of a licensee to seek access to any electronic communications facility defined in the Electronic Communications Act, no 36 of 2005 (the "ECA").
- The Authority (and the Complaints and Compliance Committee) is obliged to make determinations based on the facts put before it through dispute resolution procedures.
- Section 43(4) of the ECA gives the Authority the flexibility to determine the technical and financial feasibility of each dispute on a case by case basis.

## 2. Scope of the regulations

It should be clearly understood that the scope of these draft regulations is considerably wider than simply the copper twisted pair local loop. This means that Telkom SA Limited is by no means the only ECNS licensee that will be expected to make its facilities available to other licensees. This changes the emphasis and the dynamics of the discussion on the subject significantly. The reader's attention is drawn to the definition of the Local Loop:

*"Local Loop" means all physical media, including electrical, optical and radio frequency, used as the electronic communications facilities for the connection of an end-user or end-site to an access network aggregation point on the electronic communications network.*

Similarly, Bitstream is defined as follows:

*"Bitstream Access" means a facility provided to a facilities seeker in order to provide data services through a logical circuit to an end-user or end-site.*

*The Bitstream logical circuits shall be aggregated and transported between the facilities seeker and the facilities provider through an interconnect in such a way that the facilities seeker has full control over the International Standards Organisation Open Systems Interconnect (ISO OSI) Model Layer 3 (network layer) elements of the service, including routing and addressing.*

It is hoped that this clearly differentiates between what is meant by the term "Bitstream" and the IP Connect product currently provided by Telkom SA SOC Limited to certain other licensees with respect to ADSL access. Further, it is hoped that this definition is sufficiently broad to cover the mobile / GSM / cellular / fixed wireless equivalent services, some of which are currently provided by some licensees.

The intention behind these wider definitions is to facilitate the dispersion of broadband Internet access to as wide a segment of the population as possible, over as large a geographical area as possible. This facilitates meeting the objectives specified in Section 2 of the ECA.

There is no intention that any licensee providing access should suffer any financial harm. In terms of access to any form of local loop (fixed line copper, fixed line fibre and/or wireless access), the network owner has the right to set the price to ensure future sustainability of their own private network services and future investment commitments. The licensee seeking access to the network is obliged to pay the capital costs of setting up their access to the local loop and any associated usage fees. However, should the access seeker consider that the price charged is unreasonable, they may dispute these charges before the Authority.

### **3. Prior Commitments regarding Local Loop Unbundling made by the Authority**

In November 2011 the Authority committed to the following in its Local Loop Unbundling Findings Note:

1. Establishing an industry working group to address the ordering system specification mechanisms to support the introduction of Bitstream
2. Establishing an Access Line Deficit recovery scheme, through a public consultation process, as a precursor to the introduction of Bitstream.
3. Conducting a Regulatory Impact Assessment on the costs and benefits of the fixed line full loop, sub-loop and shared line forms of LLU.
4. Introducing supplementary LLU Regulations
5. Undertake an inquiry into the unbundling of wireless access networks.

### **4. Progress towards achievement of these commitments**

The Authority engaged Telkom on numerous occasions during 2012 to identify whether there is alignment on the existence of the ALD and potential methods to address the concern. However, although Telkom has provided significant amounts of information in justifying why the ALD exists, the Authority does not agree with Telkom on the scope and scale of the ALD. The Authority is also of the view that it is not in a position to solely determine the value of the ALD or the most effective resolution mechanism required, if any, and that detailed public consultation is necessary. This social challenge faced by the entire ICT sector is not a justification for preventing the provision of access to any form of local loop.<sup>1</sup>

It would be a fruitless exercise to develop ordering system specification mechanisms if access to the local loop was not going to actually take place. Given the failure to find a resolution on the ALD, this exercise has been abandoned.

The matter of conducting a Regulatory Impact Assessment is discussed in Section 6, below.

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<sup>1</sup> A detailed discussion on the purported ALD is provided in Annexure 1

## **5. A Review of the determinations and the correct approach to addressing requests for access to electronic communications facilities.**

The Authority has determined that the access obligation that all Electronic Communications Network Service licensees are obliged to comply with is to be upheld **independently** of specific regulatory action, based on Section 43(1) of the Electronic Communications Act which states that:

*"an electronic communications network service licensee must, on request, lease electronic communications facilities to any other person licensed in terms of this Act and persons providing services pursuant to a licence exemption in accordance with the terms and conditions of an electronic communications facilities leasing agreement entered into between the parties, unless such request is unreasonable."*

The main reason for this determination is that a licensee seeking access to facilities has the right to submit a request to any ECNS licensee at any time in any geographic location. This means that different types of requests will arise at different times. Disputes therefore need to be addressed on a case by case basis (as already stated in Regulations 4 and 5 of the ECFL regulations, GG 33252, 31 May 2010).

The Authority is mandated by the ECA to uphold access to electronic communications by specifying the minimum terms and conditions of any such agreement. The Authority may, based on Section 46(6) of the ECA intervene when a dispute arises and make a determination based on Section 43(4) of the ECA which states that:

*"a request is reasonable where the Authority determines that the requested lease of electronic communications facilities –*

*(a) is technically and financially feasible; and*

*(b) will promote the efficient use of electronic communications networks and services"*

In practice, with regards to a dispute, it is therefore up to an ECNS licensee who has received a request to lease electronic communications facilities to prove that such a request is not technically and / or financially feasible and that it will not promote the efficient use of electronic communications networks and services.

Thus, it is not the responsibility of the Authority to prove or disprove the feasibility of compliance with the obligation to lease electronic communications facilities alone, but that of the licensee.

## **6. The role of a Regulatory Impact Assessment**

A Regulatory Impact Assessment (RIA) is a tool used to identify the rationale for and the choice between different forms of regulation. A RIA is only indicated where there is a choice to be made, in which case the outcome of the RIA can inform that choice. Chapter 8 of the Act enjoins the Authority to uphold access to facilities meaning that the Authority has no choice but to uphold the specified access rights and obligations for all licensees. Therefore, a Regulatory Impact Assessment study will not be conducted on the obligation to lease the Local Loop under Chapter 8 of the ECA

The remainder of this document focuses purely on the discussion of access to the local loop under the obligation to lease electronic communications facilities.

## 7. Content of the Draft Regulations

ICASA provides further clarification as to the justification of certain regulations in the section below:

### 7.1. Regulations 5 & 6: Financial and Technical Feasibility

Regulations 5 & 6 aim to provide guidance with regard to Section 43(4)(a) of the Act. The Authority is of the view that an open-access environment is one where licensees are not in a position to provide significant cross-subsidisation between/across service offerings. Therefore any request is both financially and technically feasible if the ECNS licensee already provides such services to itself, unless substantial cross-subsidisation takes place.<sup>2</sup> Such cross-subsidisation may be anti-competitive in nature or may be a necessary requirement to ensure the provision of services to consumers. The Authority will have to take such considerations into account, and the balance thereof, if any disputes arise.

### 7.2. Regulation 7: Non-discriminatory access to the Local Loop

Regulation 7 refers to four (4) areas for potential discrimination against or between licensees seeking access to the local loop – Pricing, Equality, Quality and Transparency. Only those areas requiring further discussion are outlined below:

- Regulation 7(a) indicates that a vertically integrated operator must separate out its accounts between retail and infrastructure services so as to ensure effective costing and pricing for facilities. This approach may be achieved through internal accounting separation, functional separation or any other form of accounting that ensures complete transparency regarding the provisioning of wholesale access versus the provisioning of a services to an end-user.
- Regulation 7(d) requires any I-ECNS licensee with ownership of a local loop to publish its pricing offerings transparently through the provision of this information to the Authority.

### 7.3. Regulation 10: Terms and conditions for ECFL agreements for the purposes of bitstream and shared/full loop services

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<sup>2</sup> High initial capital costs are addressed in Regulation 7

This section of the regulations is to specify the "*the manner in which unbundled electronic communications facilities are to be made available*" as per Section 44(3)(m) of the Act.

ICASA provides two options for stakeholders to consider. The first option is to uphold the rights and obligations of access to the local loop via ICASA imposing broad terms and conditions. In this case, ICASA sees no need to amend the existing terms and conditions as specified in the ECFL Regulations, which are repeated in these draft regulations. This option is referred to as Option A.

The second option is that these regulations include specific terms and conditions for access to the local loop for the purposes of bitstream and shared/full loop unbundling. This option is referred to as Option B.

ICASA seeks stakeholders' inputs on both which approach will best facilitate access to the local loop as well as specific recommendations if stakeholders are of the view that specified terms and conditions are required as per Option B.

#### **8. Regulation 15: Provision of information to the Authority**

ICASA requires this information to establish the efficacy of bitstream and shared/full loop unbundling over time. In addition, ICASA will use this information for public reporting from time to time.

#### **9. Exemptions**

The Authority has not yet considered the granting of any exemptions to these regulations.

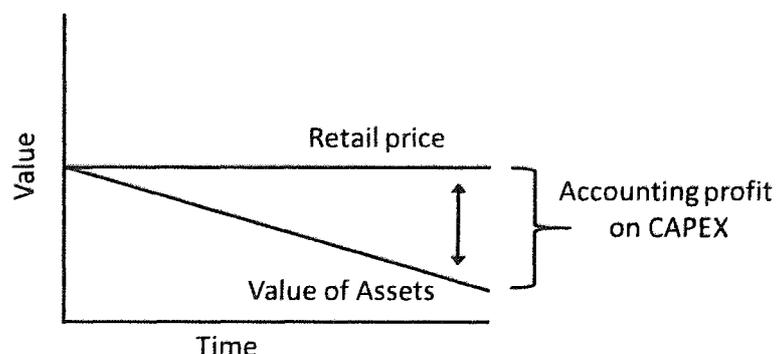
### Annexure 1: The purported Access Line Deficit

The primary determinant of success of the first four commitments made as part of the November 2011 Findings Note and referred to in Section 3 above would be the resolution of the actual value of Telkom's purported Access Line Deficit (ALD) incurred in the provision of retail fixed line services over copper lines, and the causes of such a deficit.

A prior regulatory accounting system, known as the Chart of Accounts/Cost Accounting Manual (COA/CAM) regulations specified the manner in which Telkom must specify its costs to outline the cost components and therefore cost drivers in the provision of fixed line retail services.

These regulations allowed Telkom to account for its capital costs using the Current Cost Accounting Principle. This principle is aimed at valuing assets that will need replacement over time, but crucially, only in a situation where these are the only assets being used to provide nationwide services. In other words, if there was no alternative to the services offered by Telkom, then it may be necessary to account for costs to ensure sufficient revenues for future investment.

However, there are flaws to this model of accounting. It is normal business practice for companies to account for assets on a historical cost basis and utilise the accounting profits that accrue under this practice to fund investment where required. In other words the depreciation of capital assets and the concomitant need to re-invest represent drivers for efficiency in strategic planning.

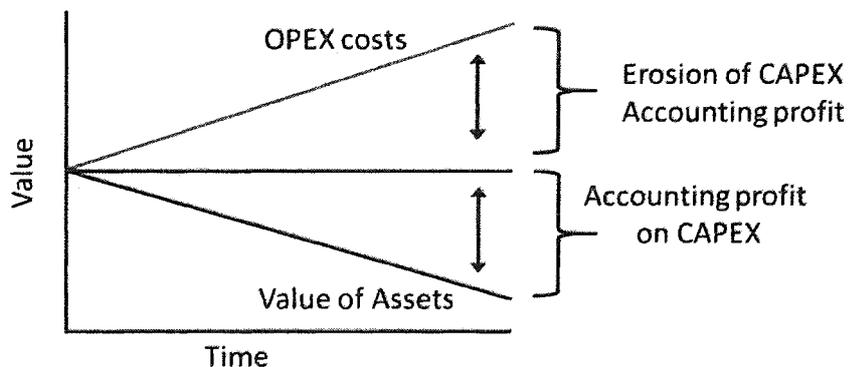


**Figure 1: How profit should grow over time**

The graph above represents the increasing return on capital employed as long as the asset remains useful, yet is allowed to depreciate. The accounting profit should be used to generate new services to either enhance the existence of the asset, to replace the asset or a combination of the two.

No such incentive exists when pricing strategies are allowed to be based on the current cost accounting principle. In this scenario the revenue generated to recapitalise the company over time is generated immediately in the provision of **existing services**. This situation means that the firm has less pressure to seek new opportunities to enhance the value of its service proposition.<sup>3</sup>

However, maintenance or operational costs generally increase as assets age because of the increased need for maintenance. Therefore it is possible for operational costs to rise above any accounting profit earned through the depreciation of assets. The graph below provides an example where such a situation may occur.

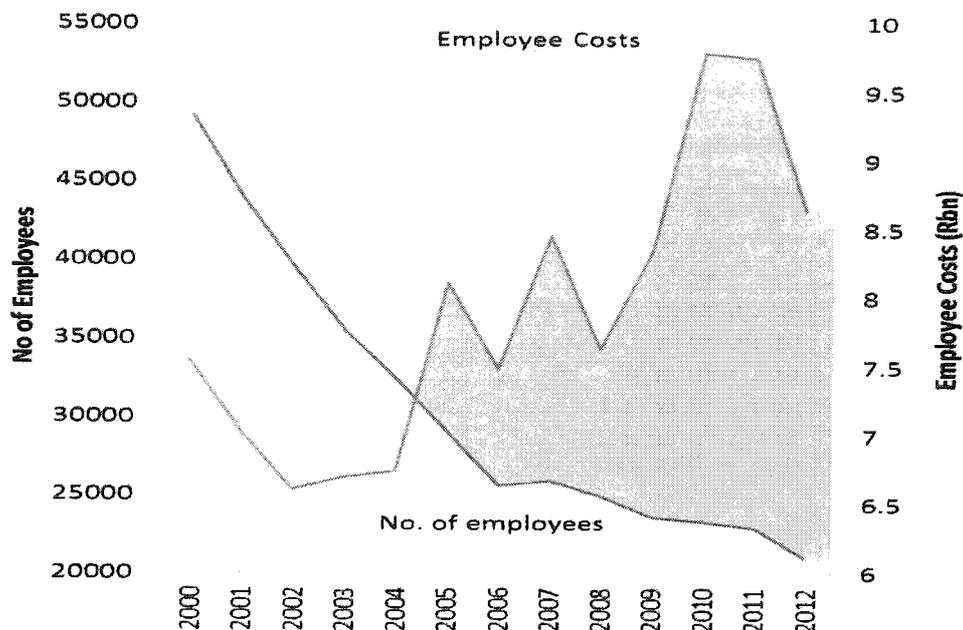


**Figure 2: How profit can be eroded**

In this situation it is crucial for a firm to establish and implement significant cost containment strategies. Again, where a firm does not face any form of competition from alternative sources there may not be any pressure for such strategies. It is also possible for a firm to fail in its efforts to maintain costs. However, this is not

<sup>3</sup> A potential example of Telkom's failure to seek new business opportunities was its very slow introduction of ADSL 2+ technologies. Telkom introduced ADSL 2+ in 2012, whereas Libya introduced such in 2007, with Egypt and Ireland following in 2008. These three countries all have large rural areas and long local loop lengths, similar to South Africa.

an excuse for a firm to justify high prices. The evidence from Telkom is that it has been unsuccessful in maintaining operational costs as the graph below illustrates:



**Figure 3: Have OPEX costs eroded profits?**

Telkom employee costs per line have increased by 2%<sup>4</sup> since 2000 yet it has reduced its permanent workforce<sup>5</sup> by 28,000 people or 57%.

Furthermore, the number of fixed copper lines being used by end-users has reduced dramatically, with Telkom losing 1,693,000 customers since 2000. This represents a reduction of 31% over 12 years. This reduction is linked not only to the introduction of alternatives for access to communications but also the cost base and quality of retail service provision by Telkom, as stated by the previous Chief Executive Officers of Telkom itself.<sup>6</sup>

<sup>4</sup> Telkom Operator data and Annual Reports

<sup>5</sup> Telkom does however pay a substantial amount of money for services, which is generally linked to technicians using their own assets to provide technical and maintenance services to the company

<sup>6</sup> See Annual Reports and various presentations made by Telkom at Annual Report presentations. For a succinct summary on Telkom's acknowledgement of the need to improve customer service, see: [www.mybroadband.co.za/news/telecoms/80605-have-we-not-heard-that-before-telkom.html](http://www.mybroadband.co.za/news/telecoms/80605-have-we-not-heard-that-before-telkom.html)

The Authority has engaged Telkom on numerous occasions during 2012 to identify whether there is alignment on the existence of the ALD and potential methods to address the concern.

However, although Telkom has provided significant amounts of information in justifying why the ALD exists, the Authority does not agree with Telkom on the scope and scale of the ALD. The principle cost make-up of the ALD is related to the cost of employees and labour-related costs. It is imperative that Telkom manage its labour costs in line with an efficient provision of services. A key measure of this is the number of employees per active fixed line. Telkom reported a figure of 125 active fixed lines per employee in 2002<sup>7</sup> increasing to 191 active fixed lines per employee in 2012.<sup>8</sup> While this has improved, it remains far below its competitors in this metric.

It is evident that Telkom's business model and approach to service provision needs to be adapted considering that the market dynamics have changed considerably since 2000. The Authority acknowledges the recent impairment of assets in this regard. The Authority notes the difficulties faced by the shareholder in terms of employment sustainability within the ICT sector as well as at Telkom specifically. However, this social challenge faced by the entire ICT sector is not a justification for preventing the provision of access to any form of local loop.

Despite Telkom having provided copious information about the purported Access Line Deficit, the information provided was not convincing. The Authority therefore determines that the purported ALD is of no relevance in determining access to the Local Loop.

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<sup>7</sup> See <https://secure1.telkom.co.za/ir/archive/sens/sensarticle-88.html>

<sup>8</sup> See <https://secure1.telkom.co.za/ir/financial/interim-results-2013/operational-data.html>

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